

Abstract

A photocurable dental restorative comprising (i) 100 parts by weight of a polymerizable monomer, (ii) 0.01 to 5 parts by weight of a photopolymerization initiator of acylphosphine oxide, and (iii) 200 to 1900 parts by weight of an inorganic filler, wherein the inorganic filler (iii) is a mixed filler of:

(A) irregular-shaped inorganic particles having an average particle size of not smaller than 0.1 μm but smaller than 1 μm ;

(B) spherical inorganic particles having an average primary particle size of not smaller than 0.1 μm but not larger than 5 μm ; and

(C) fine inorganic particles having an average primary particle size of not larger than 0.1 μm , which are so blended as to satisfy the following mass ratios ① to ③:

① $m\text{A}/(m\text{B} + m\text{C}) = 0.2 \text{ to } 3$

② $m\text{B}/(m\text{B} + m\text{C}) = 0.5 \text{ to } 0.99$

③ $m\text{C}/(m\text{B} + m\text{C}) = 0.01 \text{ to } 0.5$

where $m\text{A}$, $m\text{B}$ and $m\text{C}$ are masses of the inorganic particles (A) to (C).

The restorative features excellent handling property, and makes it possible to obtain a cured product having a high fracture toughness and excellently glossy surface.